

Simulated Steering Wheel Activities



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The **National Institute for Driver Behavior** (NIDB) suggests activities that can take place in the classroom for students to be able to get guidance for correct in-vehicle performance. For example, let's assume we want our students to use a 9-3 hand position, and hand-over-hand steering. The students in the classroom can be given a simulated steering wheel and asked to demonstrate correct hand position. Discussion can take place as to why 9-3 is a good method for holding the steering wheel. The students are all involved, and most attentive while they are holding the simulated "steering wheel." You can then ask them to demonstrate how to turn the wheel using hand-over-hand steering. Again, discussions and practice can take place during the classroom. Students that have difficulty in the classroom with this physical equivalent practice (PEP) activity can be directed to get more practice at home (using the perimeter of a large salad bowl or another disc shaped object) before attending the in-vehicle session. To do this activity during the class it may have required 20 minutes of class time. If you had 24 students in the class and waited to do this same activity during the in-car session while behind-the-wheel, and if you spent only 10 minutes with each student it would consume 240 minutes of in-vehicle instructor time, rather than 20 minutes of classroom time. By doing the PEP activity of steering wheel techniques in the class, you would save in-car time that can be used for more valuable practice. And, by giving the student the experience in class, it is a better learning experience when they attend the in-vehicle because you are making them accountable for what should be performed.

Once successful usage of a skill, concept or behavioral pattern is demonstrated in the classroom, then, as soon thereafter as possible, the student should apply that same process during an in-vehicle session. In-vehicle practice activities can take place while the student is in the back seat as well as while driving.

Brain Research Shows We Should Do It In The Classroom First

When we look at recent research on how the brain develops during the learning process there is evidence of two powerful reasons that all in-vehicle behavioral patterns should be learned first in the classroom* before performance behind the wheel takes place. First, the classroom is a non-threatening environment where the student can be totally relaxed and capable of understanding and demonstrating correct behavior. Second, in order for effective learning to take place, there must be a period of non-activity. Once a behavioral pattern is performed, the subconscious processes it while we are doing other things, which then allows for application of the performance to occur in the vehicle. Therefore, the vehicle becomes a testing platform with opportunity for the student to demonstrate what they had learned which helps to transfer the behavioral patterns into long term memory.

*This document was prepared before NIDB developed the e-Coaching Program, so many of the classroom activities can now be performed by using the e-Coach.

Use of Simulated Steering Wheels

The following behaviors can be practiced in the classroom by the use of the *simulated steering wheels*:

1. Positioning hands on the steering wheel
2. Gripping of the steering wheel
3. Turning of the wheel techniques
4. Target identification and targeting
5. Using central vision to see target
6. Using fringe vision to see positioning
7. Checking the left, front, right zones before turning steering wheel
8. Turning head in direction of steering before steering
9. Seeing targeting path
10. Using transition pegs for steering recovery

P.E.P. – Holding Wheel, Targeting

Part One: Give all students *simulated steering wheel*. Say, "I want you to pretend you're in a car and this is the steering wheel that you're holding. You can discuss correct methods of holding the steering wheel. Direct the students to stand and hold the "steering" wheel in a 9-3 position. Tell the students that you will represent a target that they are to aim the vehicle for. Have all students turn their heads to look directly at you. Then have them move the steering wheel and their body until you appear in the center of it. You can point out that they are seeing you with their central vision while they see you in alignment to the steering wheel with their fringe vision. Move your position to the left or right side of the room. Have students turn their head to look directly at you, then have them turn their steering wheel to get on target. Walk to the back of the classroom, having students turning their head and steering wheel to keep you in alignment with the center of the steering wheel. Continue doing the activity by walking about the classroom, having the students stay on target. Give the students positive feedback.

Part Two: Select various targets within the room such as the door, window, flag that will be used as targets. Select one of the targets for the students to make a right turn toward. Require them to first check the left, front and right zones, then turn their head before turning their body to get aligned with the target. Repeat this process for other targets with left and right turns. Pay special attention to the correct usage of the behaviors. Tell the trainees to, "get off-target to the left" and then say, "get back on target". Doing this on-target, off-target to the left and right a few times will be helpful to visualize how the car goes off target during a rear wheel skid situation.

Note:

The Simulated Steering Wheels can be purchased at NIDB.org Shopping Cart.